

Technical Notes

Background Information on Death Rates

All data on mortality are from the Detailed Mortality File, which contains information from death certificates filed in the 50 states and the District of Columbia in 1996. CDC's National Center for Health Statistics (NCHS) prepared the Detailed Mortality File in accordance with guidelines from the World Health Organization. These guidelines specify that member nations classify causes of death by the current *Manual of the International Statistical Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM)*.

The cause-of-death rates in this report are presented by sex, race/ethnicity (white, black, Asian/Pacific Islander, American Indian/Alaska Native, and Hispanic), and ICD-9 code. For this report, persons classified as Hispanic ethnicity are not included in a race category. Population data (denominators for death rates) are postcensal estimates from the Bureau of the Census.

Death rates are based on the decedent's state of residence and exclude the deaths of nonresidents of the United States. All death rates are age adjusted using the 1970 standard U.S. population. Age-adjusted rates allow deaths to be compared among groups because, unlike crude rates, they take into account the effect of different age distributions in different populations. Direct age adjustment is calculated by weighting the annual age-specific rates by the population distribution in the standard population. Age-adjusted rates should not be compared with crude rates. Death rates are not presented for racial/ethnic groups that had 20 or fewer deaths in a given category.

Differences in Death Rates in Different Publications

The state-specific numbers of deaths and the rates of death due to a specific cause in this publication may differ from those published by the states or by other groups for the following reasons:

- The cut-off dates for accepting vital statistics records into the annual file for producing statistics may differ.

- The interstate exchange program through which states receive data on events that involved residents but occurred in other states might not include all records.
- The international rules for selecting the underlying cause of death are interpreted and applied differently in some states.
- The standard U.S. population used for age-adjustment may not have been the 1970 population used here.
- Race/ethnicity may have been classified differently.

Cause-of-Death Classifications

The following ICD-9 codes are used in this report:

Total cardiovascular diseases	390–459
Ischemic heart disease	410–414
Stroke	430–438
All cancers	140–208
Lung cancer	162.2–162.9
Colorectal cancer	153–154.1, 159.0
Breast cancer, women	174
Diabetes mellitus	250
Other:	
Unintentional injuries	E800–E949
Chronic obstructive pulmonary disease	490–496
Pneumonia and influenza	480–487
Suicide	E950–E959
HIV	042.0–044.9
Homicide	E960–E978

Surveillance of Behavioral Risk Factors and Preventive Services Among Adults

The prevalences of behavioral risk factors and use of preventive services among adults are state-based estimates from CDC's Behavioral Risk Factor Surveillance System (BRFSS). Initiated in 1981 and developed in conjunction with the states, the BRFSS now enables all states to gather information on the prevalence of behavioral risk factors and other health-related measures in their individual jurisdictions. The BRFSS is an annual, state-based, random-digit-dialed telephone survey of health-related behavior. Each participating state selects a probability sample of its noninstitutionalized civilian adult population (aged ≥ 18 years) who have telephones. The data are reported by sex and race/ethnicity (white, black, Asian/Pacific Islander, American Indian/Alaska Native, and Hispanic origin). The design of the BRFSS allows for comparisons both between states and between individual states and the nation.

Estimates are not provided for racial or ethnic categories that had fewer than 50 respondents because such estimates would be unreliable. The median value for a risk factor or a preventive service in the United States (i.e., the point at which there is an equal number of states above and below the value) is used when the states are being ranked from the highest percentage to the lowest percentage. The average value for a risk factor or a preventive service is used as a prevalence estimate for the United States as a whole and for subgroups within the United States.

The following questions from the BRFSS were used to define the adult risk behaviors included in this report:

- Have you smoked at least 100 cigarettes in your entire life?
- Do you smoke cigarettes everyday, some days, or not at all?
- During the past month, did you participate in any physical activities or exercises such as running, calisthenics, golf, gardening, or walking for exercise?
- How often do you drink fruit juices such as orange, grapefruit, or tomato?
- Not counting juice, how often do you eat fruit?
- How often do you eat green salad?
- How often do you eat potatoes not including french fries, fried potatoes, or potato chips?
- How often do you eat carrots?
- About how much do you weigh without shoes?
- About how tall are you without shoes?

- A mammogram is an x-ray of each breast to look for breast cancer. Have you ever had a mammogram?
- How long has it been since you had your last mammogram?
- A blood stool test is a test that may use a special kit at home to determine whether the stool contains blood. Have you ever had this test using a home kit?
- When did you have your last blood stool test using a home kit?
- A sigmoidoscopy or proctoscopy is when a tube is inserted in the rectum to view the bowel for signs of cancer and other health problems. Have you ever had this exam?
- When did you have your last sigmoidoscopy or proctoscopy?
- Do you have any kind of health care coverage, including health insurance, prepaid plans such as HMOs, or government plans such as Medicare?

All estimates are based on data from the 1998 BRFSS except for the estimates for colorectal cancer screening. These estimates are based on 1997 BRFSS data because the survey includes questions about sigmoidoscopy and the fecal occult blood test only in odd-numbered years

No BRFSS data on mammograms are included for California because California modifies the survey question on breast cancer screening in such a way that the responses are not comparable to those from other states.

Overweight in this report is defined using the 1998 guidelines released by the National Institutes of Health's National Heart Lung and Blood Institute for identifying overweight and obese adults. Overweight is based on self-reported height in inches and weight in pounds. These values are converted into height in meters and weight in kilograms and used to calculate a body mass index (BMI)—the number of kilograms divided by the number of meters squared ($\text{BMI} = \text{kg}/\text{m}^2$). BMI represents a height-to-weight ratio. According to the 1998 guidelines, persons with BMI values of 25 or greater are overweight, and those with BMI values of 30 or greater are obese. The prevalence of overweight is considerably higher using the new guidelines for overweight than using the previous guidelines ($\text{BMI} \geq 27.8 \text{ kg}/\text{m}^2$ for men and $\geq 27.3 \text{ kg}/\text{m}^2$ for women). For example, based on the 1998 BRFSS data, the prevalence of overweight in Alabama is 59.6% using the new guidelines but 35.8% using the previous guidelines.

More information about the BRFSS is available on the NCCDPHP Web site, at www.cdc.gov/nccdphp/brfss.

Appendix

Youth Risk Behavior Survey

The Youth Risk Behavior Survey (YRBS) is part of CDC's Youth Risk Behavior Surveillance System (YRBSS). Since 1990 the YRBSS has provided vital information on health-related practices among U.S. high school students. This information enables states and school jurisdictions to better target efforts to prevent health risk behaviors among young people. The behaviors included in this report are derived from the 1997 YRBS. Students in grades 9–12 participated in the surveys, which were conducted by CDC and departments of education in 33 states and the District of Columbia. This report summarizes selected results from the national survey and the state surveys. Some states did not have both an overall response rate of at least 60% and appropriate documentation. The data from these states are unweighted and thus apply only to the students participating in the survey. YRBS data are reported by sex and by race/ethnicity (white, black, Hispanic, other). The data are not age-adjusted since the age distribution by grade varies little among states. Estimates are not provided for racial or ethnic categories that had fewer than 100 respondents because such estimates would be unreliable.

The following questions from the YRBS were used to define the risk behaviors among high school students included in this report:

- During the past 30 days, on how many days did you smoke cigarettes?
- In an average week when you are in school, on how many days do you go to physical education (PE) classes?
- Yesterday, how many times did you eat fruit?
- Yesterday, how many times did you drink fruit juice?
- Yesterday, how many times did you eat green salad?
- Yesterday, how many times did you eat cooked vegetables?

More information about the YRBSS is available on the NCCDPHP Web site, at www.cdc.gov/nccdphp/dash. State-specific prevalence estimates for risk factors and their confidence intervals can also be obtained using *Youth '97*, a CD-ROM that provides prevalence estimates for risk factors by state, year, grade, sex, and race/ethnicity in table and graph format. For a free copy of this CD-ROM, call 770-488-3257.

For More Information

For questions related to the 1996 death rates, contact Ralph Donehoo, M.P.H., by telephone at (770) 488-5441 or by fax at (770) 488-488-5974.

For questions about prevalence estimates based on BRFSS data, contact Nora Keenan, Ph.D., by telephone at (770) 488-8001 or by fax at (770) 488-8151. For more general questions about the BRFSS, contact Eve Powell-Griner, Ph.D., at (770) 488-2524 or by fax at (770) 488-8150.

For questions about prevalence estimates from the YRBSS, contact Laura Kann, Ph.D., by telephone at (770) 488-3257 or by fax at (770) 488-3112.

Sources

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Additional Sources of Information for Topics Covered in This Report

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Web Sites with Expanded Information Related to This Report

General information:

www.cdc.gov	CDC's main Web site
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Chronic diseases and their risk factors:

www.cdc.gov/nccdphp	CDC, National Center for Chronic Disease Prevention and Health Promotion
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www.cdc.gov/nchs	CDC, National Center for Health Statistics
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Cardiovascular disease:

www.americanheart.org	American Heart Association
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www.nhlbi.nih.gov/nhlbi	National Institutes of Health, National Heart Lung and Blood Institute
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Cancer:

www.cancer.org	American Cancer Society
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Diabetes:

www.diabetes.org	American Diabetes Association
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www.cdc.gov/nccdphp/ddt/pubs/facts98.htm	CDC's Diabetes Fact Sheet
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